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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

		Application No.	Applicant(s)
Office Action Summary		10/656,525	BARTON ET AL.
		Examiner	Art Unit
		Jay A. Morrison	2168

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>05 September 2003</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-57</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-57</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>05 September 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date <u>12/31/03</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-57 are pending.

Specification

2.   The abstract of the disclosure is objected to because it contains more than the

allowed 150 words. Correction is required. See MPEP § 608.01(b).

Claim Objections

3.   Claims 7-8,36,53, and 56 are objected to because of the following informalities:

As per claims 7-8: these claims appear twice in the application although they are

not duplicates. The office will examine all of these claims, identifying the repeated claim

numbers as "second instance".

As per claim 36, third line: "at lease one" should be "at least one".

As per claims 53 and 56: periods not included at end of claims.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

5.   Claim 27 recites the limitation "the user" in line 4. There is insufficient

antecedent basis for this limitation in the claim. For purposes of examination the Office

will interpret "the entity" as "the user".

6.   Claim 16 recites the limitation "the set of objects" in line 3. There is insufficient antecedent basis for this limitation in the claim. For purposes of examination the Office will interpret "the set of objects" as "the set of database objects".

Claim Rejections - 35 USC § 101

7.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8.   Claims 1-57 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The cited claims do not produce a tangible result. Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

Claim Rejections - 35 USC § 102

9.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10.   Claims 1-15,23-35,39-43,50-55 are rejected under 35 U.S.C. 102(b) as being

anticipated by Oracle 9i Database Documentation (Release 2 [9.2], March 2002)

('Oracle' hereinafter).

        As per claim 1, Oracle teaches

"a transfer mechanism that transfers database objects" (data transfers, page 2-

40, Oracle-Supplied Types section, Oracle 9i SQL Reference);

"and a control database object that represents the job, the transfer mechanism

operating under control of the control database object to transfer the objects in the set"

(CREATE PROCEDURE, page 14-62, Oracle 9i SQL Reference).

        As per claim 2, Oracle teaches

"the control database object specifies the set of objects" (SELECT, page 18-4,

Oracle 9i SQL Reference).

        As per claim 3, Oracle teaches

"the control database object further specifies an order in which the transfer mechanism transfers the objects in the set" (ORDER BY, page 18-9, Oracle 9i SQL Reference).

As per claim 4, <u>Oracle</u> teaches

"the order orders the objects in the set" (ORDER BY, page 18-9, Oracle 9i SQL Reference) "by size" (VSIZE, page 6-204, Oracle 9i SQL Reference).

As per claim 5, <u>Oracle</u> teaches

"the control database object includes a filter that further specifies the set of objects" (WHERE, page 18-5, Oracle 9i SQL Reference).

As per claim 6, <u>Oracle</u> teaches

"the transfer mechanism further performs an operation on one or more objects belonging to the set" (page 18-6, Oracle 9i SQL Reference);

"and the control database object includes a specification of the operation" (page 18-6, Oracle 9i SQL Reference).

As per claim 7, <u>Oracle</u> teaches

"the operation is an operation that transforms the object" (examples, page 18-27 through 18-30, Oracle 9i SQL Reference).

As per claim 8, <u>Oracle</u> teaches

"the operation is an operation that remaps a name in the object to a different

name" (expr AS c_alias, page 18-6, Oracle 9i SQL Reference; example SELECT

department_id AS d_e_dept_id, page 18-38, Oracle 9i SQL Reference).

As per claim 7, second instance, <u>Oracle</u> teaches

"the control database object includes a specification of one or more parameters

for the job, the transfer mechanism transferring the objects in the set as specified by the

parameter" (examples, page 18-27 through 18-30, Oracle 9i SQL Reference).

As per claim 8, second instance, <u>Oracle</u> teaches

"the parameter is an estimate only parameter, the transfer mechanism

responding thereto by providing an estimate of the space required for the objects in the

set without transferring the objects" (VSIZE, page 6-204, Oracle 9i SQL Reference).

As per claim 9, <u>Oracle</u> teaches

"the control database object includes a specification of a status of the job; and

the transfer mechanism updates the status in the specification during the transfer"

(datafile status, page 2-3, Oracle 9i User-Managed backup and Recovery Guide).

As per claim 10, <u>Oracle</u> teaches

"the control database object is queryable to obtain a current status of the job from the specification of the status" (query the view, page 2-3, Oracle 9i User-Managed backup and Recovery Guide).

As per claim 11, Oracle teaches

"the transfer mechanism employs the specification of the status of the job"(query the view, page 2-3, Oracle 9i User-Managed backup and Recovery Guide) "to restart the job after the job has been stopped" (resume where it left off, page 4-34, Oracle 9i User-Managed backup and Recovery Guide).

As per claim 12, Oracle teaches

"the control database object specifies a remote database management system as a source of the set of objects" (SELECT and external tables, page 17-48, table 17-4, Oracle 9i SQL Reference);

"and the transfer mechanism fetches the set of objects from the remote database management system" (external table, SELECT, page 17-48, table 17-4, Oracle 9i SQL Reference).

As per claim 13, Oracle teaches

"the control database object specifies the database management system as a destination of the set of database objects" (remote output table, page 17-26, Oracle 9i SQL Reference);

"and the transfer mechanism further fetches the set of database objects into the database management system" (SELECT, page 18-4, Oracle 9i SQL Reference).

As per claim 14, <u>Oracle</u> teaches

"the control database object specifies a set of files in the database system as a source or destination of the set of database objects" (page 17-48, table 17-4, Oracle 9i SQL Reference).

As per claim 15, <u>Oracle</u> teaches

"when the set of files is the source of the set of database objects, the set of files is the result of a job and includes a copy of the control database object for the job" (schema objects, stored procedure, pages 2-107 through 2-108, Oracle 9i SQL Reference).

As per claim 23, <u>Oracle</u> teaches

"the control database object further specifies a template whereby the transfer mechanism may add a file to the set of files when required for transferring the objects" (add a file, page 13-28, SQL Reference).

As per claim 24, <u>Oracle</u> teaches

"the control database object specifies a remote database management system as a source of the set of objects" (SELECT and external tables, page 17-48, table 17-4,

Oracle 9i SQL Reference) "and a set of files in the database system as a destination

therefor" (DATAFILE specifies datafile or files, pages 15-83 through 15-84, Oracle 9i

SQL Reference);

"and the transfer mechanism transfers the set of objects from the remote

database management system to the set of files" (tablespace, page 9-29, Oracle 9i SQL   .

Reference).

As per claim 25, Oracle teaches

"the control database object specifies a set of files in the database system as a

source of the set of objects" (datafile, page 9-29, Oracle 9i SQL Reference);

"and the transfer mechanism transfers the set of objects from the set of files into

the database management system" (tablespace, page 9-29, Oracle 9i SQL Reference).

As per claim 26, Oracle teaches

"the transfer mechanism further provides an interface whereby an entity that uses

the transfer mechanism may interact with the job" (SQL*Plus SQL prompt, page 2-2,

Oracle 9i User-Managed Backup and Recovery Guide).

As per claim 27, Oracle teaches

"the interface permits the entity to attach to and detach from the job for as long

as the job's control database object exists, transfer of the objects by the transfer

mechanism being unaffected by detachment of the user from the job" (SQL*Plus SQL

prompt, page 2-2, Oracle 9i User-Managed Backup and Recovery Guide).

As per claim 28, <u>Oracle</u> teaches

"the entity may use the interface via a network connection to the database

management system" (access the remote database, first paragraph, page 2-120, Oracle

9i SQL Reference).

As per claim 29, <u>Oracle</u> teaches

"the interface includes a defining interface whereby the entity may define a

portion of the job's control database object" (SQL*Plus SQL prompt, page 2-2, Oracle 9i

User-Managed Backup and Recovery Guide).

As per claim 30, <u>Oracle</u> teaches

"the interface includes an executing interface whereby the entity may interact

with the transfer mechanism from the time the transfer mechanism begins transferring

the objects in the set until the job's control database object ceases to exist" (SQL*Plus

SQL prompt, page 2-2, Oracle 9i User-Managed Backup and Recovery Guide).

As per claim 31, <u>Oracle</u> teaches

"the entity may use the executing interface to obtain a current status of the job

from a specification of the status of the job in the control database object" (page 2-3,

Determining Datafile Status for Online Tablespace Backups section, Oracle 9i User-

Managed Backup and Recovery Guide).

As per claim 32, Oracle teaches

"the entity may use the executing interface to stop performance of the job by the

transfer mechanism or the transfer mechanism may stop performance of the job in

response to an error" (interactively stop, page 1-14, second paragraph, Oracle 9i

Backup and Recovery Concepts).

As per claim 33, Oracle teaches

"the entity may use the executing interface to restart a stopped job, the transfer

mechanism using a specification of the status of the job in the control database object to

restart the job" (interactively start or stop, page 1-14, second paragraph, Oracle 9i

Backup and Recovery Concepts).

As per claim 34, Oracle teaches

"the entity may use the executing interface to affect allocation of resources by the

transfer mechanism to the job" (threads parameter, page 3-8, Oracle 9i, SQL*Plus

Users Guide and Reference).

As per claim 35, Oracle teaches

"the transfer mechanism operates on objects in the set in parallel"

(parallel_clause, page 7-49, Oracle 9i SQL Reference);

"and the entity uses the executing interface to specify a maximum degree of

parallelism for the job" (integer indicates degree of parallelism, page 7-51, Oracle 9i

SQL Reference).

As per claim 39, <u>Oracle</u> teaches

"obtaining metadata for the object type using the metadata to make a

determination of the composition of the objects of the type" (metadata views, page B-9,

table B-3, Oracle 9i SQL Reference);

"selecting a transfer technique for objects belonging to the type from a plurality

thereof according to the determination" (SELECT, page 18-4, Oracle 9i SQL

Reference);

"and transferring the objects belonging to the type according to the selected

transfer technique" (SELECT, page 18-4, Oracle 9i SQL Reference).

As per claim 40, <u>Oracle</u> teaches

"in the step of transferring, the objects are transferred in parallel"

(parallel_clause, page 7-49, Oracle 9i SQL Reference).

As per claim 41, <u>Oracle</u> teaches

"receiving a value that specifies a degree of parallelism, the objects being transferred in parallel as determined by the degree of parallelism" (integer indicates degree of parallelism, page 7-51, Oracle 9i SQL Reference).

As per claim 42, Oracle teaches

"the transfer technique for certain of the objects permits transfer of portions of the contents of the object in parallel" (parallel_clause, page 7-49, Oracle 9i SQL Reference);

"and in the step of transferring the certain objects, the portions are transferred in parallel" (parallel_clause, page 7-49, Oracle 9i SQL Reference).

As per claim 43, Oracle teaches

"defining the job's control database object" (CREATE PROCEDURE, page 14-62, Oracle 9i SQL Reference);

"and executing the job by causing the transfer mechanism to transfer the set of database objects under control of the job's control data base object" (data transfers, page 2-40, Oracle-Supplied Types section, Oracle 9i SQL Reference).

As per claim 50, Oracle teaches

"the step of defining the job includes the step of creating the job's control database object" (CREATE PROCEDURE, page 14-62, Oracle 9i SQL Reference).

As per claim 51, <u>Oracle</u> teaches

"the step of defining the job includes the step of specifying a source and/or destination for the set of database objects in the job's control database object" (FROM, page 18-5, Oracle 9i SQL Reference).

As per claim 52, <u>Oracle</u> teaches

"the step of defining the job includes the step of specifying the set of database objects in the job's control database object" (FROM, page 18-5, Oracle 9i SQL Reference).

As per claim 53, <u>Oracle</u> teaches

"the step of defining the job includes the step of specifying a filter in the job's control database object, the filter defining a subset of the specified set of database objects as the set of objects to be transferred in the job" (WHERE, page 18-5, Oracle 9i SQL Reference).

As per claim 54, <u>Oracle</u> teaches

"the step of defining the job includes the step of specifying an operation in the job's control database object that is to be performed on one or more objects in the set" (SELECT, page 18-5, Oracle 9i SQL Reference).

As per claim 55, <u>Oracle</u> teaches

"the step of defining the job includes the step of defining a parameter for the job

in the job's control database object for the job" (examples, page 18-27 through 18-30,

Oracle 9i SQL Reference).

Claim Rejections - 35 USC § 103

11.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

12.   Claims 16-22,44-49,56-57 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Oracle 9i Database Documentation (Release 2 [9.2], March 2002)

('Oracle' hereinafter) as applied to claims 1,14, and 43 above, and further in view of

Rivlin (Patent Number 6,032,159).

As per claim 16,

Oracle does not explicitly indicate "the control database object is a table and

includes rows representing objects belonging to the set of objects".

However, Rivlin discloses "the control database object is a table and includes

rows representing objects belonging to the set of objects" (column 6, line 55 through

column 7, line 10).

It would have been obvious to one of ordinary skill in the art to combine <u>Oracle</u> and <u>Rivlin</u> because using the steps of "the control database object is a table and includes rows representing objects belonging to the set of objects" would have given those skilled in the art the tools to obtain speed benefits over previous methods. This gives the user the advantage of being able to copy specific objects in a set.

As per claim 17,

<u>Oracle</u> does not explicitly indicate "each row representing an object belonging to the set includes a specification of an order in which the object represented by the row was transferred to the set of files relative to other objects belonging to the set".

However, <u>Rivlin</u> discloses "each row representing an object belonging to the set includes a specification of an order in which the object represented by the row was transferred to the set of files relative to other objects belonging to the set" (column 6, line 55 through column 7, line 10).

It would have been obvious to one of ordinary skill in the art to combine <u>Oracle</u> and <u>Rivlin</u> because using the steps of "each row representing an object belonging to the set includes a specification of an order in which the object represented by the row was transferred to the set of files relative to other objects belonging to the set" would have given those skilled in the art the tools to obtain speed benefits over previous methods. This gives the user the advantage of being able to copy specific objects in a set.

As per claim 18,

Oracle does not explicitly indicate "when the set of files is the destination of the set of database objects, there is a row representing each object that has been transferred to the set of files".

However, Rivlin discloses "when the set of files is the destination of the set of database objects, there is a row representing each object that has been transferred to the set of files" (column 6, line 55 through column 7, line 10).

It would have been obvious to one of ordinary skill in the art to combine Oracle and Rivlin because using the steps of "when the set of files is the destination of the set of database objects, there is a row representing each object that has been transferred to the set of files" would have given those skilled in the art the tools to obtain speed benefits over previous methods. This gives the user the advantage of being able to copy specific objects in a set.

As per claim 19,

Oracle does not explicitly indicate "when the set of files is the source of the set of database objects, there is a row representing each object which is to be transferred into the database management system".

However, Rivlin discloses "when the set of files is the source of the set of database objects, there is a row representing each object which is to be transferred into the database management system" (column 6, line 55 through column 7, line 10).

It would have been obvious to one of ordinary skill in the art to combine Oracle and Rivlin because using the steps of "when the set of files is the source of the set of

database objects, there is a row representing each object which is to be transferred into the database management system" would have given those skilled in the art the tools to obtain speed benefits over previous methods. This gives the user the advantage of being able to copy specific objects in a set.

As per claim 20,

Oracle does not explicitly indicate "the row representing a particular object includes a field whose value specifies an order in which the object is to be transferred relative to the other objects".

However, Rivlin discloses "the row representing a particular object includes a field whose value specifies an order in which the object is to be transferred relative to the other objects" (column 6, line 55 through column 7, line 10).

It would have been obvious to one of ordinary skill in the art to combine Oracle and Rivlin because using the steps of "the row representing a particular object includes a field whose value specifies an order in which the object is to be transferred relative to the other objects" would have given those skilled in the art the tools to obtain speed benefits over previous methods. This gives the user the advantage of being able to copy specific objects in a set.

As per claim 21,

Oracle does not explicitly indicate "the set of files is the result of a job and includes a copy of the control database object for the job, the copy having a row for

each database object contained in the set of files; and when the transfer mechanism is transferring the objects belonging to the set of objects from the set of files into the database management system, the control database object contains a copy of at least the rows representing the objects from the copy of the control database object in the file set".

However, Rivlin discloses "the set of files is the result of a job and includes a copy of the control database object for the job, the copy having a row for each database object contained in the set of files; and when the transfer mechanism is transferring the objects belonging to the set of objects from the set of files into the database management system, the control database object contains a copy of at least the rows representing the objects from the copy of the control database object in the file set" (column 6, line 55 through column 7, line 10).

It would have been obvious to one of ordinary skill in the art to combine Oracle and Rivlin because using the steps of "the set of files is the result of a job and includes a copy of the control database object for the job, the copy having a row for each database object contained in the set of files; and when the transfer mechanism is transferring the objects belonging to the set of objects from the set of files into the database management system, the control database object contains a copy of at least the rows representing the objects from the copy of the control database object in the file set" would have given those skilled in the art the tools to obtain speed benefits over previous methods. This gives the user the advantage of being able to copy specific objects in a set.

As per claim 22,

Oracle does not explicitly indicate "the row in the copied rows representing a particular object includes a field whose value specifies an order in which the object is to be transferred relative to the other objects represented by the copied rows".

However, Rivlin discloses "the row in the copied rows representing a particular object includes a field whose value specifies an order in which the object is to be transferred relative to the other objects represented by the copied rows" (column 6, line 55 through column 7, line 10).

It would have been obvious to one of ordinary skill in the art to combine Oracle and Rivlin because using the steps of "the row in the copied rows representing a particular object includes a field whose value specifies an order in which the object is to be transferred relative to the other objects represented by the copied rows" would have given those skilled in the art the tools to obtain speed benefits over previous methods. This gives the user the advantage of being able to copy specific objects in a set.

As per claim 36, Oracle teaches

"at lease one file containing the objects belonging to the set thereof" (external table, page 15-8, Oracle 9i SQL Reference);

Oracle does not explicitly indicate "and a control object in the set thereof that specifies for each object belonging to the set the location of the object in the set of files

and an order in which the database management system transfers object during the

transfer".

However, Rivlin discloses "and a control object in the set thereof that specifies for

each object belonging to the set the location of the object in the set of files and an order

in which the database management system transfers object during the transfer" (column

3, lines 26-42).

It would have been obvious to one of ordinary skill in the art to combine Oracle

and Rivlin because using the steps of "and a control object in the set thereof that

specifies for each object belonging to the set the location of the object in the set of files

and an order in which the database management system transfers object during the

transfer" would have given those skilled in the art the tools to obtain speed benefits over

previous methods. This gives the user the advantage of being able to copy specific

objects in a set.

As per claim 37,

Oracle does not explicitly indicate "the file further includes metadata that defines

a type of database objects and one or more database objects that belong to the type

defined by the metadata and the order determines that the metadata is processed

before the database objects that belong to the type defined by the metadata".

However, Rivlin discloses "the file further includes metadata that defines a type

of database objects and one or more database objects that belong to the type defined

by the metadata; and the order determines that the metadata is processed before the

database objects that belong to the type defined by the metadata" (column 3, lines 9-42).

It would have been obvious to one of ordinary skill in the art to combine <u>Oracle</u> and <u>Rivlin</u> because using the steps of "the file further includes metadata that defines a type of database objects and one or more database objects that belong to the type defined by the metadata; and the order determines that the metadata is processed before the database objects that belong to the type defined by the metadata" would have given those skilled in the art the tools to obtain speed benefits over previous methods. This gives the user the advantage of being able to copy specific objects in a set.

As per claim 38, <u>Oracle</u> teaches

"a header in each file of the set, the header including an indication the control object is contained in the file and if so, the location of the control object in the file and an identifier that identifies the file within the set" (page 7-8 and 7-9, Crosschecks of RMAN Backups and Copies section, Oracle 9i Recovery manager user's Guide);

"and the control object uses the identifier in specifying the location of the object in the set of files" (page 7-8 and 7-9, Crosschecks of RMAN Backups and Copies section, Oracle 9i Recovery Manager User's Guide).

As per claim 44,

Oracle does not explicitly indicate "the step performed in either the defining step or the executing step of: attaching to the job, attachment permitting at least reading and/or modification of the job's control database object".

However, Rivlin discloses "the step performed in either the defining step or the executing step of: attaching to the job, attachment permitting at least reading and/or modification of the job's control database object" (column 7, lines 25-58).

It would have been obvious to one of ordinary skill in the art to combine Oracle and Rivlin because using the steps of "the step performed in either the defining step or the executing step of: attaching to the job, attachment permitting at least reading and/or modification of the job's control database object" would have given those skilled in the art the tools to provide recoverable and consistent data in the case of a system failure. This gives the user the advantage of not risking losing time and data.

As per claim 45,

Oracle does not explicitly indicate "the step performed after the step of attaching to the job of: reading the job's control database object to get the job's current status".

However, Rivlin discloses "the step performed after the step of attaching to the job of: reading the job's control database object to get the job's current status" (column 7, lines 25-58).

It would have been obvious to one of ordinary skill in the art to combine Oracle and Rivlin because using the steps of "the step performed after the step of attaching to the job of: reading the job's control database object to get the job's current status" would

have given those skilled in the art the tools to provide recoverable and consistent data

in the case of a system failure. This gives the user the advantage of not risking losing

time and data.

As per claim 46, Oracle discloses

"the transfer mechanism transfers the data objects in parallel and the method

further comprises the step performed after the step of attaching to the job of: specifying

a degree of parallelism with which the objects may be transferred" (page 7-49 through

7-51, Oracle 9i SQL Reference).

As per claim 47,

Oracle does not explicitly indicate "the step performed after the step of attaching

to the job of: starting the step of executing the job".

However, Rivlin discloses "the step performed after the step of attaching to the

job of: starting the step of executing the job" (column 7, lines 25-58).

It would have been obvious to one of ordinary skill in the art to combine Oracle

and Rivlin because using the steps of "the step performed after the step of attaching to

the job of: starting the step of executing the job" would have given those skilled in the

art the tools to provide recoverable and consistent data in the case of a system failure.

This gives the user the advantage of not risking losing time and data.

As per claim 48, Oracle teaches

"the step performed after attaching to the job of: stopping the step of executing the job" (recovery CANCEL, page 4-18 through 4-19, Oracle 9i User-Managed backup and Recovery Guide).

As per claim 49,

Oracle does not explicitly indicate "saving job state in the control database object such that the step of executing the job may be restarted from the job state".

However, Rivlin discloses "saving job state in the control database object such that the step of executing the job may be restarted from the job state" (column 7, lines 25-58).

It would have been obvious to one of ordinary skill in the art to combine Oracle and Rivlin because using the steps of "saving job state in the control database object such that the step of executing the job may be restarted from the job state" would have given those skilled in the art the tools to provide recoverable and consistent data in the case of a system failure. This gives the user the advantage of not risking losing time and data.

As per claim 56,

Oracle does not explicitly indicate "the step of executing the job includes the step performed when the step of executing the job must be stopped of: saving job state in the control database object such that the stopped executing step may be restarted from the job state".

However, Rivlin discloses "the step of executing the job includes the step

performed when the step of executing the job must be stopped of: saving job state in

the control database object such that the stopped executing step may be restarted from

the job state" (column 7, lines 25-58).

It would have been obvious to one of ordinary skill in the art to combine Oracle

and Rivlin because using the steps of "the step of executing the job includes the step

performed when the step of executing the job must be stopped of: saving job state in

the control database object such that the stopped executing step may be restarted from

the job state" would have given those skilled in the art the tools to provide recoverable

and consistent data in the case of a system failure. This gives the user the advantage of

not risking losing time and data.

As per claim 57,

Oracle does not explicitly indicate "the step of executing the job includes the step

performed when the step of executing the job has been stopped of: using the job state

to restart the stopped executing step".

However, Rivlin discloses "the step of executing the job includes the step

performed when the step of executing the job has been stopped of: using the job state

to restart the stopped executing step" (column 7, lines 25-58).

It would have been obvious to one of ordinary skill in the art to combine Oracle

and Rivlin because using the steps of "the step of executing the job includes the step

performed when the step of executing the job has been stopped of: using the job state

to restart the stopped executing step" would have given those skilled in the art the tools

to provide recoverable and consistent data in the case of a system failure. This gives

the user the advantage of not risking losing time and data.

Conclusion

13.   The prior art made of record, listed on form PTO-892, and not relied upon is

considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jay A. Morrison whose telephone number is (571) 272-

7112. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Tim Vo can be reached on (571) 272-3642. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

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Business Center (EBC) at 866-217-9197 (toll-free).

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**TIM VO
PRIMARY EXAMINER**